Puget Sound Truck Lines, Inc.
Seattle Site

Storm Water Pollution Prevention Plan
WSDOE Permit No. SO3000949D

RB Engineering

PO Box 923
Chehalis, WA 98532

Storm Water Pollution Prevention Plan (SWPPP)

January 2005

Project Information

Project:	**Puget Sound Truck Lines - Seattle**
Prepared for:	Puget Sound Truck Lines
Contact:	Joe Conley 3720 Airport Way S. PO Box 24526 Seattle, WA 98124-0526 (800) 638-2254

Reviewing Agency

Jurisdiction:	Washington State Department of Ecology
Permit Number:	S03-000949
Project Contact	Joyce Smith (360) 407-6858

Project Engineer

Prepared by:	RB Engineering PO Box 923 Chehalis, WA 98532 (360) 740-8919 FAX (360) 740-8912
Contact:	Robert Balmelli PE
RBE Project:	01067
File Number:	c:\rbengr\projects\2001\01067\01067_SWPPP

Plan Certification

I, _____ certify that this document and all attachments were prepared under my direction and in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information organized herein. Based on my inquiry of the persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate and complete.

_____ _____

Authorized Facility Representative Date

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PART I - SITE ASSESMENT

The format of this report follows the outline provided in the Guidance Manual for Developing a Storm Water Pollution Prevention Plan for Industrial Facilities, Washington State Department of Ecology Publication WQ-R-93-015. Preparation of this SWPPP does not guarantee compliance with the WSDOE General Permit. It is the responsibility of the Industrial Site Owner to implement the necessary Best Management Practices, Training and Water Quality Monitoring and Sampling of the site to meet the requirements of the Industrial General Storm Water Discharge Permit.

Section 1 – Site Information and Operation

Project Proponent: Contact:	Puget Sound Truck Lines (PSTL) Joe Conley 3720 Airport Way S. PO Box 24526 Seattle, WA 98124-0526 (800) 638-2254
Parcel Numbers:	213620-068-05
Total Site Area:	6.35 acres overall
Zoned:	Industrial
Site Address:	7303 – 8th Ave S, Seattle WA 98108
Required Permits:	WSDOE Storm Water General Permit
Section, Township, Range	Sec 29, Twn 24N, Rng 4E, W.M.
Latitude and Longitude	Lat 47° 32' 11", Long 122° 19' 23"

Pollution Prevention Team

Responsible Official	Position	Office Phone
Joe Conley	Regional Contact	(206) 623-1600 (800) 638-2254
Miles Kaatz	Terminal Manager	(206) 623-1600 (800) 638-2254

Facility Operations

PSTL - Seattle is a trucking company located at 7303 – 8th Avenue South in Seattle, Washington. Operations at the site include vehicle maintenance, truck and trailer washing, loading and unloading trailers, and diesel refueling operations. The majority of the site consists of asphalt and is utilized for trucking equipment parking.

Section 2 – Site Assessment Inspection

PSTL Property Assessment

On February 17, 2003, RB Engineering staff met with the owner and performed a site assessment of the facility. Inspections included the paved drive and parking area, vehicle maintenance area, truck washing, loading docks, and truck and trailer washing area.

Vehicle maintenance is conducted at the PSTL – Seattle site. The maintenance shop includes an inventory of: a mobile grease cart on wheels, a solvent tank, a motor oil tank, a used oil collection pan that pumps to an outside containment tank, used oil filter drums, windshield washer fluid, motor oil, and hydraulic oil. Phoenix Environmental is used to pick up used solvent, Arcom Oil Company is used for the pick up of waste oil and an approved recycling company is used for the recycling of antifreeze. Used rags will be disposed of in solid waste. Drums for lubricating and servicing the trucks and trailers are kept on a plastic collection grid and, when needed, spills are collected by a recycling service.

Truck washing is done prior to maintenance by PSTL on the concrete slab located northwest and adjacent to the maintenance area. The wash water is collected into a recessed catch basin and then treated with an oil/water separator (OWS) and discharged to the sanitary sewer. This area does contain small leaks from areas associated with the vehicle washing and maintenance; however, the OWS is effective treatment before the sanitary sewer.

PSTL truck fueling is conducted on this site. At the fueling station the pump and hoses are covered with a solid roof preventing excessive storm water infiltration to the fueling area. Underneath the pump and hoses is a metal fuel spill collection pan. This pan is designed to pipe any spilling of fuel to a concrete collection area in the pavement. This area is designed with the correct slopes to allow for drainage to a catch basin that is recessed in the center of the collection area. This flow is piped to an OWS and then piped to the sanitary sewer. This system does have some exposure to storm water in the area of the catch basin, although this system is reducing the run-on of storm water from the pavement and eliminating the run-off of spillage to the storm water flow. In the event of a spill overflow or leak on the pavement, this system is used to wash the fuel into the catch basin and OWS. The fuel tank is double walled and protected from vehicles by concrete barriers. No sign of oil sheen or fuel leaking was prevalent at the time of inspection.

PSTL contracts with Emerald Environmental Company or an approved company for cleaning of the trucks and trailers by using a steamer sump extraction. This company is required to plug the storm drainage inlets with a balloon system and vacuum the washing discharge into a tank and dispose of offsite at a treatment facility. All washing

by this company is performed in the trailer wash area located east of the maintenance shop. See the site map located in Appendix 1.

Section 3 – Materials Inventory List

PSTL uses and stores materials appropriate for its vehicle maintenance activities. A list of the types and materials that are currently used is located in Appendix 2.

Section 4 – Past Spills and Leaks

RB Engineering interviewed Dave Eaden regarding any significant past spills of oil or diesel fuel during our site inspection. It was indicated that there were no large onsite spills at this location.

Section 5 – Areas Associated with Industrial Activity

Areas associated with industrial activity include the following:

Vehicle Washing Area

This area is paved with three (3) catch basins that are plugged during washing to prevent wash water from entering the storm drain. The contour of the asphalted area is designed for retention of the water. The contracted washing company vacuums the area with an industrial machine and collects the water to a tanker that takes it off site to a treatment facility.

Onsite Truck Refueling

All truck refueling is currently done out in the yard at a 20,000 gallon diesel double walled fuel tank and covered fueling station. A fueling policy, as outlined in this SWPPP, will be incorporated and signage will be installed to inform vehicle operators of proper refueling and emergency response procedures in case of a small and/or large spill. . Two CBs which discharge to sanitary sewer. Suggest, install covered. ~~fueling~~ over fueling station, CBO 6-9-05

Vehicle Parking and Storage Yard

The majority of this site consists of all asphalted yard area, which includes storage of tractors and trailers. No maintenance is conducted outside of the maintenance shop and the area does not exceed the required threshold for implementation of treatment BMP's.

Maintenance Dock

The dock area is used for washing off trucks before maintenance. All water from this area is routed to an OWS and then to the sanitary sewer. No significant spills or leaks are prevalent.

Trailer Washing

PSTL contracts with a mobile washing company to alternate the cleaning of 26 tractors one week and 26 tractors the next. This company is required to plug the storm drainage inlets with a balloon and vacuum the washing discharge into a tank and dispose of offsite.

Section 6 – Non-Storm Water Discharge Investigation

Non-storm water discharges from the site are routed to either oil/water separators and then to the sanitary sewer, or vacuumed to storage tank and taken offsite to a treatment facility. See Appendix 1 for a detailed site map.

Appendix 7 contains the standard certification form "Non-Storm Water Discharge Dry Weather Assessment & Certification Form" that is required to be signed every year after completion of the dry weather inspections. The SWPPP is considered **out of compliance** if this certification is not completed every year.

Section 7 – Capital Improvements Planned

The following capital improvements are planned for the PSTL Seattle site in accordance to the WSDOE General Permit:

1. Fossil Filter Flo-guard inserts to be installed in catch basins 1,2,3. See Appendix 1, "Filter Installation Plan" for details.

2. Pipe re-alignment of storm drain

Section 8 – Capital Improvement Implementation Schedule

The following is a summary of the proposed capital improvement projects for the Puget Sound Truck Lines site.

Improvements		**Year of Improvement**						
Item No. Per Section 7	Work Done By	2005	2006	2007	2008	2009	2010	2011
1	Sept	X						
2	Sept.		X					

Section 9 – Employee Training

Employee training will include the following:

- Annual review of this SWPPP and BMP's for the Spill Prevention and Emergency Cleanup Plan with all shop employees.

- Annual review of this SWPPP with all employees to ensure continued familiarity with the SWPPP.

- Annual review of emergency spill response procedures and post them in the maintenance shop, and outside liquid storage area, wash rack area, and the fuel island.

- Annual review of truck and vehicle refueling policy. These policies and procedures shall be posted at the refueling pumps.

Section 10 – Not Used

Section 11 – Not Used

PART II – BMP IDENTIFICATION

Section 1 – Operational BMP's

Good Housekeeping

Good housekeeping includes ongoing cleanup of areas that are most likely to contribute pollutants to the storm water. The following practices will be implemented:

Vehicle Maintenance Area

- Used shop towels to be stored in designated containers and collected by a service.
- Shop rags, absorbent mats, or absorbent litter shall be applied immediately to all small spills, collected, and disposed in the solid waste garbage.
- The shop area shall be swept on a daily basis and debris placed into solid waste garbage.
- All liquid containers shall be clearly labeled with the name and substance of liquid present in the storage container.

Parking and Site Roadways

- PSTL shall not perform any trailer or truck washing within the gravel yard area. Any oil drippings from parked vehicles shall be cleaned up using absorbent towels. The existing fuel island OWS shall be cleaned as outlined in the preventative maintenance section below.

Preventive Maintenance

Preventive maintenance of the following items shall be implemented as a minimum to prevent minor or major liquid spills and prevention of sediments entering into the City of Seattle storm water and/or sewer system.

Vehicle Maintenance
All equipment and support equipment will be inspected regularly for leaks that could lead to a minor or major spill of liquid material. All vehicles shall be maintained on a regular basis to prevent and detect any possible fluid leaks. Any fluid leaks shall be fixed immediately upon detection. All vehicle servicing shall be performed with the shop area and not outside in the yard area.

Truck and Trailer Washing
All sediments and sludge from the wash area shall be removed at the time of washing to prevent clogging the storm drainage system. Proper disposal of removed sediment shall be performed. Phoenix Environmental or another service shall be contracted for cleaning of the OWS and detainment vault.

Onsite Refueling Station and Oil/Water Separator (OWS)
Proper posting of fueling policies at the fueling station and regular cleaning of fueling pad catch basins and OWS is necessary to prevent possible excess discharge of oil and diesel to the sanitary sewer. The fuel station OWS shall be cleaned every 6 months of excess oils and inspected per the inspection requirements listed below. A local environmental cleaning service shall be contracted for this service.

Spill Prevention and Emergency Cleanup

Areas most likely to incur liquid spills include the shop maintenance area and the onsite refueling island.

Possible drainage of large unattended spills inside the shop will accumulate within the shop area. The shop is built over a flat concrete slab which allows for timely cleanup of minor or major spills. The majority of possible contaminants are located within the enclosed containers in the southwest area of the maintenance shop. Routine cleanup of any spills within the containment area should be completed on a regular basis. Emergency spill kits shall be stored near each end of the maintenance shop to prevent large spills from flowing outside of the covered shop area.

Secondary containment for the outside oil and fuel is provided by a metal collection pan under the fuel pumping area overflow is directed to the sloped concrete and asphalt pavement to a OWS catch basin.

The site map in Appendix 1 shows the existing parking area, storm water collection system, and fuel island collection system. Appendix 1 also includes detailed site plans of each building, fueling island, and location of stored fluids.

Emergency spill kits shall be located inside the maintenance shop doors and at the refueling station. An emergency spill kit shall include the following:

- Absorbent towels for spill cleanup (fuel truck and shop)
- Large zip lock bags for storage of used absorbent (fuel truck and shop)
- Oil boom for bay doors (in shop areas)
- 2 pair of rubber gloves
- Safety glasses
- Oil absorbent floor dry

Appendix 9 includes a list of "Spill Response Procedures" and a "Fueling Policy". A copy of the "Spill Response Procedures" shall be posted at all oil containment sites, maintenance shops, and refueling stations. A copy of the "Fueling Policy" will be posted for PSTL employees and the fuel supplier at all fueling locations.

Section 2 – Source Control BMP's

The following source control BMP's have been identified during the site assessment by RB Engineering staff.

OWS

Two OWS's to prevent pollutants from transferring to sanitary outfall.

Refueling Pad

A covering over the refueling station prevents splashing from rainwater to the pavement.

Catch Basins

The catch basins are plugged by the washing contractor and the liquid is disposed of at a treatment facility.

Section 3 - Erosion and Sediment Control BMP's

Asphalted Yard Area

Because the area is asphalted, this area is meeting all erosion control BMP requirements. Fossil Filters installed in grates will help prevent sediment-laden runoff.

Section 4 – Treatment and Volume Control BMP's

OWS

An OWS is installed for the treatment of the overflow from the fueling station and the maintenance wash area.

Refueling Station

The existing refueling station is on asphalt and has a collection pan system that appears to be working properly, as there was very little trace of oil contaminants in that location. See additional BMP's and emergency spills cleanup plans.

Catch Basins

Fossil Filters installed in grates will help prevent infiltration of oils and sediment-laden runoff.

Section 5 – Additional Best Management Practices (BMP)

Appendix 8 includes excerpts from the WSDOE storm water manual for the following BMP's listed below that apply to the PSTL site. These BMP's should be used as a reference for training and regular site inspections.

Vehicle Fueling Stations – WSDOE BMP S1.10

Vehicle/Equipment Washing and Steam Cleaning– WSDOE BMP S1.20

Loading and Unloading Liquid Materials – WSDOE BMP S1.30

Liquid Storage in Above Ground Tank – WSDOE BMP S1.40

Container Storage of Liquids – WSDOE BMP S1.50

Emergency Spill Cleanup Plans – WSDOE BMP S1.80

Maintenance of Storm Drainage Facilities – WSDOE BMP S2.00

Section 6 – Handling Liquid and Solid Wastes

The following procedures shall be implemented for handling of liquid wastes for the PSTL site.

- Cans and drums with liquid storage will be tightly covered when not in use.
- All containers will be properly labeled with the contents. If a liquid is transferred into a secondary container, that container will be labeled as well.
- Spigots, pumps and funnels will be used when dispensing and transferring materials to reduce the possibility of spills.
- Drip pans or other protective devices will be required for all liquid materials transfer operations to catch incidental spillage and drips from dispensing products from drums, barrels, or dispenser pumps.
- All liquid spent fluids shall be stored under cover from rainwater with secondary containment provided until removed by a hazardous waste disposal contractor.
- Used oil filters shall be drained by puncturing the filter and allowing it to drain for 24 hours. Drained filters will be kept in a separate container marked "Used Oil Filters Only" until collected by a recycler.
- Used oil shall be stored in the waste oil tank located outside the vehicle maintenance shop. The waste oil tank has secondary containment and is recycled using the maintenance shop's oil burning furnace.
- Waste anti-freeze is stored in a tank labeled "Waste Anti-Freeze Only" until picked up by a licensed certified service for recycling.
- Solvent use will be primarily limited to the closed loop solvent tank located in the vehicle maintenance shop and metal fabrication shop.
- Waste brake fluid shall be collected in a separate marked, closed container until collected by a certified recycling company.
- All batteries shall be stored in an upright position inside the vehicle maintenance shop until picked up for recycling by a certified recycling company.
- Used spray cans of products like carburetor cleaner and spray paint are regulated as hazardous waste because they contain ignitable, chlorinated solvents. Spray cans shall be completely empty before disposal in the solid waste garbage. If any spray cans malfunction, they will be handled as hazardous waste or returned to the supplier.

PART III – EVALUATION / MONITORING

Section 1 – BMP Required Maintenance and Inspections

The onsite storm drainage facilities will require regular maintenance inspections. The following checklists should be used to coordinate and schedule maintenance of the onsite fueling station, wash rack, and gravel yard area.

Instructions

The following pages contain maintenance needs for most of the components that are part of your drainage system, as well as for some components that you may not have. Let us know if there are any components that are missing from these pages. Ignore the requirements that do not apply to your system. You should plan to complete a checklist for all system components on the following schedule:

1. At a minimum quarterly
2. Once in late summer (preferably September)
3. After any major storm (use 1" in 24 hours as a guideline), items marked "S" only

Using photocopies of these pages, check off the problems you looked for each time that you did an inspection. Add comments on problems found and actions taken. Keep these "checked" sheets in your files along with the completed inspection report form in Appendix 10 for a minimum of 5 years. Some items do not need to be looked at every time an inspection is done. Use the suggested frequency at the left of each item as a guideline for your inspection.

You may call the jurisdiction for technical assistance. Please do not hesitate to call, especially if you are unsure whether a situation you have discovered may be a problem.

Oil/Water Separator Maintenance:

OWS's must be cleaned to keep accumulated oil from escaping during storms. They must always be cleaned by October 15 to remove material that has accumulated during the dry season and again after a significant storm. In addition:

1 The facility shall be inspected monthly by the owner
2 Waste oil and residuals shall be disposed in accordance with local health department requirements
3 Any standing water removed during the maintenance operation must be disposed to a sanitary sewer at a discharge location approved by the jurisdiction or collected by a certified recycler
4 Any standing water removed shall be replaced with clean water to prevent oil carry-over through the outlet weir or orifice

"Fossil Filter" Catch Basin Insert Maintenance:

For maintenance of catch basins inserts, see Appendix 10.

Maintenance Checklist for Conveyance Systems (Pipes and Swales)

Frequency	Drainage System Feature	Req'd	Problem	Conditions to Check For	Conditions That Should Exist
A	Pipes	√	Sediment & debris	Accumulated sediment that exceeds 20% of the diameter of the pipe.	Pipe cleaned of all sediment and debris.
A	Pipes	√	Vegetation	Vegetation that reduces free movement of water through pipes.	All vegetation removed so water flows freely.
A	Pipes	√	Damaged (rusted, bent or crushed)	Protective coating is damaged and rust is causing more than 50% deterioration to any part of pipe.	Pipe repaired or replaced.
A	Pipes	√		Any dent that significantly impedes flow (i.e., decreases the cross section area of pipe by more then 20%).	Pipe repaired or replaced.
A	Pipes	√		Pipe has major cracks or tears allowing groundwater leakage.	Pipe repaired or replaced.
M.S.	Swales	√	Trash & debris	Dumping of yard wastes such as grass clippings and branches into swale. Unsightly accumulation of non-degradable materials such as glass, plastic, metal, foam and coated paper.	Remove trash and debris and dispose as prescribed by County Waste Management Section.
M	Swales	√	Sediment buildup	Accumulated sediment that exceeds 20% of the design depth.	Swale cleaned of all sediment and debris so that it matches design.
M	Swales	√	Vegetation not growing or overgrown	Grass cover is sparse and weedy or areas are overgrown with woody vegetation.	Aerate soils and reseed and mulch bare areas. Maintain grass height at a minimum of 6" for best storm water treatment. Remove woody growth, re-contour and reseed as necessary.
M,S	Swales	√	Erosion damage to slopes	See ponds checklist	See ponds checklist
A	Swales	√	Swale does not drain	Water stands in swale or flow velocity is very slow. Stagnation occurs.	A survey may be needed to check grades. Grades need to be in 1% range if possible. If grade is less than 1%, under drains may need to be installed.

If you are unsure whether a problem exists, please contact the Jurisdiction and ask for technical assistance.
Comments:

Key: A = Annual (March or April preferred)
M = Monthly (see schedule)
S = After major storms

ATTACHMENT "A"

Maintenance Checklist for Catch Basins and Inlets

Feature	Drainage System Feature	Req'd	Problem	Conditions to Check For	Conditions That Should Exist
M.S.	General	√	Trash, debris and sediment in or on basin	Trash or debris in front of the catch basin opening is blocking capacity by more than 10%.	No trash or debris located immediately in front of catch basin opening. Grate is kept clean and allows water to enter.
M		√		Sediment or debris (in the basin) that exceeds 1/3 the depth from the bottom of basin to invert of the lowest pipe into or out of the basin.	No sediment or debris in the catch basin. Catch basin is dug out and clean.
M		√		Trash or debris in any inlet or pipe blocking more than 1/3 of its height.	Inlet and outlet pipes free of trash or debris.
A		√	Structural damage to frame and/or top slab	Corner of frame extends more than 3/4" past curb face into the street (if applicable).	Frame is even with curb.
A		√		Top slab has holes larger than 2 inches or cracks wider than 1/4" (intent is to make sure all material is running into the basin).	Top slab is free of holes and cracks.
A		√		Frame not sitting flush on top slab, i.e., separation of more than 3/4" of the frame from the top slab.	Frame is sitting flush on top slab.
A		√	Cracks in basin walls/bottom	Cracks wider than 1/2" and longer than 3', any evidence of soil particles entering catch basin through cracks or maintenance person judges that structure is unsound.	Basin replaced or repaired to design standards. Contact a professional engineer for evaluation.
A		√		Cracks wider than 1/2" and longer than 1' at the joint of any inlet/outlet pipe or any evidence of soil particles entering catch basin through cracks.	No cracks more than 1/4" wide at the joint of inlet/outlet pipe.
A		√	Settlement/mis-alignment	Basin has settled more than 1" or has rotated more than 2" out of alignment.	Basin replaced or repaired to design standards. Contact a professional engineer for evaluation.
M		√	Fire hazard or other pollution	Presence of chemicals such as natural gas, oil and gasoline. Obnoxious color, odor or sludge noted.	No color, odor or sludge. Basin is dug out and clean.
A		√	Outlet pipe is clogged with vegetation	Vegetation or roots growing in inlet/outlet pipe joints that is more than 6" tall and less than 6" apart.	No vegetation or root growth present.

If you are unsure whether a problem exists, please contact the Jurisdiction and ask for technical assistance.
Comments:

Key: A = Annual (March or April preferred)
M = Monthly (see *schedule)*
S = After major storms

D.M.R and Visual Inspection Report Form

Completed by: _____

Date inspected: _____

Time: _____

Time since last rain: _____

Quantity of last rain (inches): _____

Flow observed: _____

Temperature (c/f): _____

PH: _____

Volume of water gal/per/min: _____
(Taken when water sample is taken)

Description of the condition of the inspection site

- odor
- floating materials
- visible sheen
- discoloration
- turbidity
- ~~odor~~

Signature_____

Section 2 - Responsible Organization

PSTL shall inspect and coordinate proper maintenance of the onsite storm water, truck and trailer washing area, fueling island catch basins, and OWS.

Section 3 – Monitoring and Sampling Plan See pg. 47.

Monitoring Requirements

PSTL under the Industrial Stormwater General Permit will be required to conduct quarterly monitoring of stormwater. PSTL must report their monitoring results for each quarter. The results of visual monitoring will be kept with this SWPPP. The results of sampling and analysis will be submitted to Ecology. If there is no discharge during the entire quarter, PSTL must submit a report stating that no discharge occurred. If PSTL was not required to conduct sampling and analysis based on consistent attainment of benchmark values, PSTL must submit a report stating that sampling was not required based on consistent attainment. The quarters are defined as:

First Quarter:	January, February, March
Second Quarter:	April, May, June
Third Quarter:	July, August, September
Fourth Quarter:	October, November, December

Visual Monitoring

Visual Monitoring shall be done at least quarterly and will coincide with sampling. Visual monitoring shall assess the BMP's outlined in this SWPPP for the PSTL site. The visual inspection shall be conducted by personnel named in the SWPPP to verify that the description of potential pollutant sources required under General Permit is accurate; the site map as required in the SWPPP has been updated or otherwise modified to reflect current conditions; and the controls to reduce pollutants in stormwater discharges associated with industrial activity identified in the SWPPP are implemented and adequate. All discrete outfalls shall receive visual inspection. Inspection shall include observations for the presence of floating materials, suspended solids, oil and grease, visible sheen, discoloration, turbidity, odor, etc. in the stormwater discharge(s).

In addition to quarterly visual inspection during storm events, PSTL shall conduct at least one dry season (July, August, and September) inspection each year by personnel named in the SWPPP and after at least seven (7) consecutive days of no precipitation. The dry season inspection shall determine the presence of non-stormwater discharges such as domestic wastewater, noncontact cooling water, or process wastewater (including leaching) to the stormwater drainage system that are not authorized under this permit. If a non-stormwater discharge is discovered PSTL shall notify Ecology. PSTL shall eliminate the illicit discharge within 30 days unless additional time is authorized by Ecology.

Location ID	Visual Inspection Location Description
1	Fueling Island and OWS
2	Truck and Trailer Washing Area
3	Maintenance Shop
4	Equipment and Vehicle Parking Areas and Outfalls
5	Above Ground Waste Oil Tank
6	Concrete Slab Wash Area and OWS

Sampling Locations, Procedures, and Parameters

Stormwater must be sampled according to the instructions below. PSTL is not required to sample outside of regular business hours but should make an effort to make sure that this does not result in a failure to capture a storm event during an entire quarter. If PSTL is unable to sample according to any of these criteria they must submit an explanation with the monitoring report that includes the variance and the reason why. Sampling of stormwater will be conducted in accordance with the following requirements. If one or more of the sample collection criteria below can not be met, the permittee must still collect and submit stormwater sampling result. A permittee is required to sample only once in a sample collection period and use its best efforts to achieve the storm event sample collection criteria. If a sample is taken and one or more of the sample collection criteria are not met, the permittee is not required to conduct additional sampling for that sample collection period:

1. The Permittee may take a single grab sample, a time-proportionate sample, or a flow proportionate sample. Grab samples are taken within the first hour after discharge begins. Time-proportionate and flow proportionate samples are started within the first 30 minutes after discharge begins and are taken ver a two hour period.

2. All samples are taken as close to the point of discharge as reasonably practical except for stormwater from coal piles, which is, sampled stormwater from the coal pile commingled with stormwater for other resources.

3. The storm event sampled is at least 0.1 inches of rain in a 24-hour period or the storm event has intensity equal to 0.1 inches or greater in a 24 hour period proceeding sample collection.

4. The storm event sampled is preceded by at least 24-hours of no greater than trace discharge.

5. Samples are representative of discharge. Each distinct point of discharge offsite must be sampled and analyzed separately if activities and site conditions that may pollute the stormwater are likely to result in discharges that will significantly vary in the quantity or type of pollutants. Where pollutant types do not vary and discharge volumes are similar, the PSTL may sample only the discharge point with the highest concentration of pollutants.

Beginning with the first quarter of the year 2003, PSTL must conduct quarterly monitoring of authorized discharges of stormwater to surface water. Monitoring shall

consist of visual monitoring and stormwater sampling. Stormwater sampling requirements under provision S4.A may be modified by Ecology for facilities that have received an "extreme hardship fee reduction" under Chapter 173-224 WAC. See Section S4 of the General Permit for additional information.

Sampling may be suspended for one or more parameters based on consistent attainment of benchmark values as described below; however, a facility that conducts a significant process change must continue monitoring and may not use previous monitoring to demonstrate consistent attainment. Visual monitoring is not suspended.

Location ID	Water Sampling Location Description
A	Outfall to the Duwamish

Stormwater shall be sampled for the following parameters. PSTL may suspend stormwater sampling and analysis for turbidity, pH, zinc, and petroleum based on consistent attainment of benchmark values. Consistent attainment is defined as "eight consecutive quarters (any quarter with no stormwater discharge is not counted) where the reported values for all four parameters are equal to or less that the benchmark values". For pH equal to or less than the benchmark values means that the pH did not exceed 9 and was not less than 6. It is not necessary to test and report parameters that are required under other categories unless different sampling points are required (e.g. coal piles).

Parameter	Units	Analytical Method	Benchmark Value	Minimum Sampling Frequency
Turbidity	NTU	Meter	25 NTU	Quarterly
PH	Standard Units	Meter/litmus paper	6.5 – 8.5 SU	Quarterly
Total Zinc	µg/L	EPA 200.7	117 µg/L	Quarterly
Petroleum – Oil and Grease	mg/L	EPA 1664 or 1664A	15 mg/L	Quarterly

If the value for total zinc exceeds the benchmark value for two consecutive quarters, beginning with the next sampling quarter, PSTL shall include analysis for copper and lead as defined below. Analysis for these parameters will be required for the remainder of the permit term unless PSTL becomes eligible to suspend monitoring through consistent attainment of benchmark values. Consistent attainment is defined as "eight consecutive quarters (any quarter with no stormwater discharge is not counted) where the reported values for all parameters are equal to or less than the benchmark values". A copy of the sample procedures and report form can be found in Appendix 7 in the Storm Water Pollution Prevention Plan binder.

Parameter	Units	Analytical Method	Benchmark Value	Minimum Sampling Frequency
Total Copper	µg/L	EPA 200.7	63.6 µg/L	Quarterly
Total Lead	µg/L	EPA 200.7	81.6 µg/L	Quarterly
Hardness	mg/L	EPA 130.1 or 130.2	N/A	Quarterly

Section 4 – Record Keeping and Reporting

Unless referring to a specific permit requirement (e.g. reporting sampling results), the following conditions apply to all records and reports required by the General Permit. The falsification of information submitted to Ecology shall constitute a violation of the terms and conditions of this permit.

Recording and Reporting

The first sampling report shall be submitted to DOE by August 14, 2003. Monitoring results must be submitted quarterly after August 14, 2003. Monitoring data obtained during each monitoring period must be summarized, reported, and submitted on a Discharge Monitoring Report (DMR) form provided, or otherwise approved, by Ecology. PSTL is authorized and encouraged to use electronic submission when an official Ecology electronic DMR form becomes available. DMR forms may be submitted any time after completing the required monitoring each quarter but must be received by Ecology as indicated:

First Quarter	Not later than May 15th
Second Quarter	Not later than August 14th
Third Quarter	Not later than November 14th
Fourth Quarter	Not later than February 14th

If you are unable to submit discharge-monitoring reports electronically, you may submit printed reports to Ecology's headquarters' office:

Industrial Stormwater Permit Manager
Department of Ecology
Water Quality Program
PO Box 47696
Olympia, WA 98504-7696

All laboratory reports providing data for organic and metal parameters must include the following information: sampling date, sample location (may use SWPPP identifier), date of analysis, parameter mane, CAS number, analytical method/ number, method detection limit (MDL), laboratory practical quantitation limit (PQL), reporting units, and concentration detected. These records must be maintained onsite and are not submitted to Ecology unless requested.

Discharge Monitoring Report forms must be submitted quarterly whether or not the facility was discharging. Discharge monitoring forms must also be submitted quarterly

if monitoring has been suspended as a result of consistent attainment of benchmark values. If there was no discharge during a given monitoring period, submit the form electronically or by mail marking the "no discharge" check box. If you have suspended monitoring based on consistent attainment, submit the form electronically or by mail marking the "consistent attainment" check box.

Record Retention

PSTL shall retain records of all monitoring information for a minimum of five (5) years. Such information shall include all calibration and maintenance records and all original recordings for continuous monitoring instrumentation, copies of all reports required by the General Permit, and records of all data used to complete the application for General Permit. This period of retention shall be extended during the course of any unresolved litigation regarding the discharge of pollutants by PSTL or when requested by Ecology.

Recording of Results

For each measurement or sample taken, PSTL shall record the following information: (1) the date, exact place, method, and time of sampling or measurement; (2) the individual who performed the sampling or measurement; (3) the dates the analyses were performed; (4) the individual who performed the analyses; (5) the analytical techniques or methods used; and (6) the results of all analyses.

Non-Compliance Notification

In the event PSTL is unable to comply with any of the terms and conditions of the General Permit due to any cause, PSTL shall:

1. Immediately take action to stop, contain, and clean up unauthorized discharges or otherwise stop the noncompliance and correct the problem.
2. Immediately notify the appropriate Ecology regional office of the failure to comply.
3. Submit a detailed written report to Ecology within thirty (30) days unless additional time is authorized by Ecology. The report shall contain a description of the noncompliance, including exact dates and times, and if he noncompliance has not been corrected, the anticipated time it is expected to continue; and the steps taken or planned to reduce, eliminate, and prevent reoccurrence of he noncompliance.

Compliance with these requirements does not relieve PSTL from responsibility to maintain continuous compliance with the terms and conditions of the General Permit or the resulting liability for failure to comply with these requirements.